RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10

Source:

Date Processed by STIC:





IFWP

RAW SEQUENCE LISTING DATE: 05/15/2006
PATENT APPLICATION: US/10/531,492 TIME: 09:54:16

Input Set : A:\-24-3.APP

1

Output Set: N:\CRF4\05152006\J531492.raw

```
3 <110> APPLICANT: Hitoshi, Yasumichi
        Anderson, David
        Rigel Pharmaceuticals, Inc.
 7 <120> TITLE OF INVENTION: Cell Cycle Targets and Peptides
 9 <130> FILE REFERENCE: 021044-002430PC
11 <140> CURRENT APPLICATION NUMBER: US 10/531,492
12 <141> CURRENT FILING DATE: 2005-04-15
14 <150> PRIOR APPLICATION NUMBER: US 60/422,912
15 <151> PRIOR FILING DATE: 2002-10-30
17 <150> PRIOR APPLICATION NUMBER: US 60/460,845
18 <151> PRIOR FILING DATE: 2003-04-04
20 <150> PRIOR APPLICATION NUMBER: WO PCT/US03/34669
21 <151> PRIOR FILING DATE: 2003-10-30
23 <160> NUMBER OF SEQ ID NOS: 58
25 <170> SOFTWARE: PatentIn Ver. 2.1
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 20
29 <212> TYPE: PRT
30 <213> ORGANISM: Artificial Sequence
32 <220> FEATURE:
33 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide 35,
        peptide 88, peptide 35/88
36 <400> SEQUENCE: 1
37 Arg Leu Arg Arg Ile Cys Ser Gly Ile Leu Leu Ile Arg Arg Ile Leu
   1
40 Gly Ile Phe Val
41
44 <210> SEQ ID NO: 2
45 <211> LENGTH: 4
46 <212> TYPE: PRT
47 <213> ORGANISM: Artificial Sequence
49 <220> FEATURE:
50 <223> OTHER INFORMATION: Description of Artificial Sequence: C-terminus
         vector-derived sequence
53 <400> SEQUENCE: 2
54 Arg Pro Val Arg
55
58 <210> SEQ ID NO: 3
59 <211> LENGTH: 5
60 <212> TYPE: PRT
61 <213> ORGANISM: Artificial Sequence
63 <220> FEATURE:
64 <223> OTHER INFORMATION: Description of Artificial Sequence: C-terminus
```

TIME: 09:54:16

Input Set : A:\-24-3.APP Output Set: N:\CRF4\05152006\J531492.raw vector-derived sequence 67 <400> SEQUENCE: 3 68 Arg Pro Val Arg Pro 69 1 72 <210> SEQ ID NO: 4 73 <211> LENGTH: 17 74 <212> TYPE: PRT 75 <213> ORGANISM: Artificial Sequence 77 <220> FEATURE: 78 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide 38 80 <400> SEQUENCE: 4 81 Thr Ser Gly Leu Leu Lys Leu Val Gln Ala Lys Arg Lys Cys Cys Ile 82 84 Ser 87 <210> SEQ ID NO: 5 88 <211> LENGTH: 20 89 <212> TYPE: PRT 90 <213> ORGANISM: Artificial Sequence 92 <220> FEATURE: 93 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide 40 95 <400> SEQUENCE: 5 96 Arg Trp Asp Pro Thr Arg Leu Leu Arg Phe Arg Phe Leu Arg Met Leu 97 1 10 99 Val Arg Arg Ser 100 103 <210> SEQ ID NO: 6 104 <211> LENGTH: 20 105 <212> TYPE: PRT 106 <213> ORGANISM: Artificial Sequence 108 <220> FEATURE: 109 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide 41 111 <400> SEQUENCE: 6 112 Gly Arg Gly Cys Ile Phe Arg Trp Arg Arg Gly Leu Arg Gly Met Met 113 115 Arg Leu Phe Lys 119 <210> SEQ ID NO: 7 120 <211> LENGTH: 7 121 <212> TYPE: PRT 122 <213> ORGANISM: Artificial Sequence 124 <220> FEATURE: 125 <223> OTHER INFORMATION: Description of Artificial Sequence:lysine residues fused to N-terminus, K7, lys7 128 <400> SEQUENCE: 7 129 Lys Lys Lys Lys Lys 130 1 133 <210> SEQ ID NO: 8 134 <211> LENGTH: 78 135 <212> TYPE: DNA

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/531,492

RAW SEQUENCE LISTING DATE: 05/15/2006
PATENT APPLICATION: US/10/531,492 TIME: 09:54:16

Input Set : A:\-24-3.APP

Output Set: N:\CRF4\05152006\J531492.raw

136 <213> ORGANISM: Artificial Sequence 138 <220> FEATURE: 139 <223> OTHER INFORMATION: Description of Artificial Sequence:nucleotide sequence encoding peptide 35/88 142 <400> SEQUENCE: 8 143 cggctccgga gaatatgtag cggcattctg ctcatccgta ggatattggg cattttcgtt 60 78 144 aggcccgtga ggccctaa 147 <210> SEQ ID NO: 9 148 <211> LENGTH: 53 149 <212> TYPE: DNA 150 <213> ORGANISM: Artificial Sequence 152 <220> FEATURE: 153 <223> OTHER INFORMATION: Description of Artificial Sequence: nucleotide sequence encoding peptide 38 156 <400> SEQUENCE: 9 157 actagtgggt tgctgaagct ggtgcaggct aagcgtaagt gttgtattag tta 53 160 <210> SEQ ID NO: 10 161 <211> LENGTH: 78 162 <212> TYPE: DNA 163 <213> ORGANISM: Artificial Sequence 165 <220> FEATURE: 166 <223> OTHER INFORMATION: Description of Artificial Sequence: nucleotide sequence encoding peptide 40 169 <400> SEQUENCE: 10 170 cgttgggatc cgacgcgatt gctgcgattt cggttcctcc ggatgctagt gaggcggagt 60 78 171 aggcccgtga ggccctaa 174 <210> SEQ ID NO: 11 175 <211> LENGTH: 63 176 <212> TYPE: DNA 177 <213> ORGANISM: Artificial Sequence 179 <220> FEATURE: 180 <223> OTHER INFORMATION: Description of Artificial Sequence: nucleotide sequence encoding peptide 41 183 <400> SEQUENCE: 11 184 ggaaggggat gtatctttcg atggaggaga ggcctgcggg gaatgatgag actatttaag 60 63 185 tag 188 <210> SEO ID NO: 12 189 <211> LENGTH: 8 190 <212> TYPE: PRT 191 <213> ORGANISM: Artificial Sequence 193 <220> FEATURE: 194 <221> NAME/KEY: MOD RES 195 <222> LOCATION: (1)..(3) 196 <223> OTHER INFORMATION: Xaa = large hydrophobic amino acid selected from the group Leu, Ile, Phe, Met, Tyr or Trp, wherein 198 at least one is Leu or Ile, Xaa at position 3 may 199 be present or absent 201 <220> FEATURE:

202 <221> NAME/KEY: MOD RES

```
TIME: 09:54:16
                     PATENT APPLICATION: US/10/531,492
                     Input Set : A:\-24-3.APP
                     Output Set: N:\CRF4\05152006\J531492.raw
    203 <222> LOCATION: (4)..(6)
    204 <223> OTHER INFORMATION: Xaa = large hydrophobic amino acid selected from
              the group Leu, Ile, Phe, Met, Tyr or Trp, wherein
    205
    206
               at least one is Leu or Ile, Xaa at position 6 may
    207
              be present or absent
    209 <220> FEATURE:
    210 <221> NAME/KEY: MOD RES
    211 <222> LOCATION: (7)..(8)
    212 <223> OTHER INFORMATION: Xaa = large hydrophobic amino acid selected from
               the group Leu, Ile, Phe, Met, Tyr or Trp, wherein
    214
               at least one is Leu or Ile
    216 <220> FEATURE:
    217 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide motif
     219 <400> SEQUENCE: 12
W--> 220 Xaa Xaa Xaa Xaa Xaa Xaa Xaa
    221
         1
    224 <210> SEQ ID NO: 13
    225 <211> LENGTH: 6
    226 <212> TYPE: PRT
    227 <213> ORGANISM: Artificial Sequence
    229 <220> FEATURE:
    230 <223> OTHER INFORMATION: Description of Artificial Sequence:linker
    232 <400> SEQUENCE: 13
    233 Glu Glu Ala Ala Lys Ala
    237 <210> SEQ ID NO: 14
    238 <211> LENGTH: 37
    239 <212> TYPE: PRT
    240 <213> ORGANISM: Artificial Sequence
    242 <220> FEATURE:
    243 <223> OTHER INFORMATION: Description of Artificial Sequence: biotinylated
              peptide 40 fused to C-terminus of GFP
    246 <220> FEATURE:
    247 <221> NAME/KEY: MOD RES
    248 <222> LOCATION: (1)
    249 <223> OTHER INFORMATION: Xaa = biotinylated Gly
     251 <400> SEQUENCE: 14
W--> 252 Xaa Met Asp Glu Leu Tyr Lys Glu Glu Ala Ala Lys Ala Arg Trp Asp
    253
          1
                           5
    255 Pro Thr Arq Leu Leu Arq Phe Arq Phe Leu Arq Met Leu Val Arg Arg
    256
    258 Ser Arg Pro Val Arg
    259
                  35
    262 <210> SEQ ID NO: 15
    263 <211> LENGTH: 37
    264 <212> TYPE: PRT
    265 <213> ORGANISM: Artificial Sequence
    267 <220> FEATURE:
    268 <223> OTHER INFORMATION: Description of Artificial Sequence:inactive
```

RAW SEQUENCE LISTING

```
PATENT APPLICATION: US/10/531,492
                                                              TIME: 09:54:16
                     Input Set : A:\-24-3.APP
                     Output Set: N:\CRF4\05152006\J531492.raw
               biotinylated alanine mutant of peptide 40
     271 <220> FEATURE:
     272 <221> NAME/KEY: MOD RES
     273 <222> LOCATION: (1)
     274 <223> OTHER INFORMATION: Xaa = biotinylated Gly
     276 <400> SEQUENCE: 15
W--> 277 Xaa Met Asp Glu Leu Tyr Lys Glu Glu Ala Ala Lys Ala Arg Trp Asp
           1
     280 Pro Thr Arg Ala Leu Arg Ala Arg Phe Ala Arg Ala Leu Val Arg Arg
                      20
                                          25
     281
     283 Ser Arg Pro Val Arg
     284
                  35
     287 <210> SEQ ID NO: 16
     288 <211> LENGTH: 33
     289 <212> TYPE: PRT
     290 <213> ORGANISM: Artificial Sequence
     292 <220> FEATURE:
     293 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide 41
              fused to C-terminus of GFP
     296 <400> SEQUENCE: 16
     297 Gly Met Asp Glu Leu Tyr Lys Glu Glu Ala Ala Lys Ala Gly Arg Gly
     300 Cys Ile Phe Arg Trp Arg Arg Gly Leu Arg Gly Met Met Arg Leu Phe
     301
                      20
     303 Lys
     306 <210> SEQ ID NO: 17
     307 <211> LENGTH: 54
     308 <212> TYPE: DNA
     309 <213> ORGANISM: Artificial Sequence
     311 <220> FEATURE:
     312 <223> OTHER INFORMATION: Description of Artificial Sequence: nucleotide
               sequence of peptide 38 with in-frame stop codon
     315 <400> SEQUENCE: 17
                                                                            54
     316 actagtgggt tgctgaagct ggtgcaggct aagcgtaagt gttgtattag ttag
     319 <210> SEQ ID NO: 18
     320 <211> LENGTH: 25
     321 <212> TYPE: PRT
     322 <213> ORGANISM: Artificial Sequence
     324 <220> FEATURE:
     325 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide #40
     327 <400> SEQUENCE: 18
     328 Arg Trp Asp Pro Thr Arg Leu Leu Arg Phe Arg Phe Leu Arg Met Leu
     329 1
     331 Val Arg Arg Ser Arg Pro Val Arg Pro
                      20
     335 <210> SEQ ID NO: 19
     336 <211> LENGTH: 25
     337 <212> TYPE: PRT
     338 <213> ORGANISM: Artificial Sequence
```

RAW SEQUENCE LISTING

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/15/2006 PATENT APPLICATION: US/10/531,492 TIME: 09:54:17

Input Set : A:\-24-3.APP

Output Set: N:\CRF4\05152006\J531492.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:12; Xaa Pos.

Seq#:14; Xaa Pos.

Seq#:15; Xaa Pos. /1

Seq#:57; Xaa Pos. 1 7

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/531,492 TIME: 09:54:17

Input Set : A:\-24-3.APP

Output Set: N:\CRF4\05152006\J531492.raw

L:220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0 L:252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0 L:277 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0 L:1012 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:0